U.S. EPA/SOUTH COAST AQMD

TELECONFERENCE APRIL 30, 2020

Agenda

Using Percentage of PTE to Estimate Emission Reductions When No Records Are Available

Review of Presentation Materials for May RECLAIM/NSR Working Group Meeting

Background

- At the face-to-face meeting, South Coast AQMD staff discussed use of offsets from the Internal Bank to seed the Large Source Bank
- U.S. EPA had expressed concern for using offsets from the Internal Bank to seed the Large Source Bank
- Staff wants to explore use of same quantification approach as Rule 1315 for the Large Source Bank when actual data is not available

Offset Generation Approach for Large Source Bank

- Staff will use actual emissions data to determine offsets, where available
 - Company's operating records (e.g. fuel usage, daily production logs, etc.)
 - Annual Emissions Reports (AER)
 - Other data approved by the Executive Officer (e.g. Hearing Board data, survey information, etc.)
- Currently, facilities with actual emissions greater than 4 tons per year report emissions AER
- Where actual emissions data is not available, staff is exploring using a percentage of the PTE to determine offsets
 - Limited to smaller facilities (< 4 tons per year)</p>

Calculate offsets from actual data



If actual data is not available, use percent of PTE

Challenges with Obtaining Actual Emissions Data

- There is generally an 18 to 30 month delay after an equipment shutdown occurs before an offset is generated for the Internal Bank
 - Rule 1309 allows up to 180 days after the emission reduction occurred for a facility to submit an ERC application
 - Rule 301 allows up to 12 months after the permit expired for a facility to reactivate their permit
- Facilities with actual emissions < 4 tons per year are not required to submit Annual Emissions Reports
 - If available, may be able to use company's operating records or other data approved by the Executive officer
 - Actual fuel usage or operating data may not be available if operator cannot be contacted, insufficient recordkeeping, etc.

Further Exploration of 80% of PTE

- Rule 1315 2011 amendments
 - Amendments to maintain the District's ability to issue permits requiring offsets to major sources that require emission offsets under federal regulations but are exempted by local rules from this requirement
 - Memorializes the procedures to establish the District's NSR program equivalency with federal NSR offset requirements
 - Rule 1315 (c)(3)(B) specifies quantification of orphan reductions and shutdowns
- U.S. EPA's Technical Supporting Document (TSD) for the approval of Rule 1315
 - Provides information for the approval of Rule 1315 regarding orphan shutdowns and reductions that are calculated at 80% of the total or change in the source's NSR permitted emission levels, respectively

Technical Supporting Document for Rule 1315 Approval

Based on the TSD, U.S. EPA provides

- 1. South Coast AQMD historically implementation of 80% actual emission factor
- 80% of potential emissions as a calculation of actual emissions supported by Federal Reserve reports
 - 3. Average total industry utilization rate over past 40 years

1. South Coast AQMD historically implementation of 80% actual emission factor

- South Coast AQMD has historically implemented the 80% actual emission factor for estimating actual emission reductions
 - Used in Regulation XIII annual reports to the California Air Resources Board after they concurred that this was an accurate characterization
- South Coast AQMD Engineers perform an evaluation to determine actual controlled emission rate
 - PTE is determined by multiplying by anticipated production rate
- Table 5 from Rule 1315 staff report (February 2011) indicates that most facilities obtain a PTE that is not considerably different than their actual emissions

Table 5
Ratio of Numbers of Facilities with Potential to Emit (PTE) Below Exemptions
Thresholds to Numbers of Facilities with PTE at Exemption Thresholds

Pollutant	Facility Count PTE Range A ¹ PTE Range B ² PTE C ³			Ratio (Below Threshold: At Threshold)
VOC	4,583	2,228	2,237	3:1
NOx	4,218	560	25	191:1
SOx	480	99	3.	193:1
CO	2,719	219	0	Undefined:1
PM10	2,163	454	18	144:1

PTE Range A is greater than zero but less than 2 tons per year for VOC, NOx, SOx, and PM10 and is greater than zero but less than 15 tons per year for CO.

² PTE Range B is greater than or equal to two but less than four tons per year for VOC, NOx, SOx, and PM10 and is greater than or equal to 15 but less than 29 tons per year for CO.

³ PTE C is four tons per year for VOC, NOx, SOx, and PM10 and is 29 tons per year for CO.

2.80% of potential emissions as a calculation of actual emissions supported by Federal Reserve reports

- South Coast AQMD Rule 1315 staff report (February 2011) stated that using 80% of permitted reductions as an estimate of actual emissions is supported by two cited Federal Reserve reports
 - Industrial Production and Capacity Utilization: Federal Reserve Statistical Release G.17, June 25, 2010, http://www.federalreserve.gov/releases/g17/cap_notes.htm
 - Industrial Production and Capacity Utilization: The 2009 Annual Revision. 14 Anne Hall, Federal Reserve Board, Division of Research and Statistics, August 2009,
 - http://www.federalreserve.gov/pubs/bulletin/2009/pdf/Industrial09.pdf

3. Average total industry utilization rate over past 40 years

- U.S. EPA notes that over the past 40 years the average total industry utilization rate was 80.4%
 - Federal Reserve Statistical Release G.17, Industrial Production and Capacity Utilization, as printed on February 7, 2011, http://www.federalreserve.gov/releases/g17/cap_notes.htm
 - U.S. EPA states, "While some sources may have emission rates higher or lower than 80%, in the aggregate, the data and explanations provided by the District support the use of an overall 80% actual emissions factor"

Proposed Offset Generation Approach for Large Source Bank

- South Coast AQMD will use actual emissions data to determine offsets, where available
 - Includes all facilities with emissions > 4 tons per year
 - Staff will explore lower the AER threshold to require smaller facilities to begin reporting annual emissions
- Where actual emissions data is not available, staff is seeking input from U.S. EPA for use of 80% of PTE to estimate actual emissions